

Applicant: Frank John Marszalkowski, Jr.  
U.S.S.N.: 10/783,123

### REMARKS

In response to the Office action mailed June 24, 2005, Applicant respectfully requests reconsideration. To further the prosecution of the application, claims 1, 6-8, 10, 11, and 13-15 are amended, and claims 4, 5 and 12 are canceled. Claims 2 and 3 were previously canceled. Accordingly, claims 1, 6-11 and 13-15 remain pending, of which claims 1, 11 and 15 are in independent form. The application as presented is believed to be in allowable condition.

Claim 15 is objected to for lacking proper antecedent basis for "the circuit board." Applicant has amended claim 15 to specify "substrate" in place of "the circuit board." In light of the amendment to claim 15, reconsideration of the objection to claim 15 is respectfully requested.

Claims 1, 7-11 and 14 are rejected in the Office action as being anticipated by U.S. Publication No. US 2002/0148374 to Peckham et al. Claims 13 and 15 are rejected as being obvious and unpatentable under 35 U.S.C. §103(a) over Peckham et al. in view of U.S. Publication No. US 2002/0019680 to Nishikawa et al.

As amended, claim 1 is directed to an apparatus for performing operations on a surface of an electronic substrate. The apparatus comprises:

- a frame;
- a dispenser, coupled to the frame, to dispense a material onto the electronic substrate;
- a stencil translatable on a first gantry system, the stencil having at least one aperture to receive the material as the material is dispensed on the electronic substrate by the dispenser;
- a controller that controls dispensing of the material on the electronic substrate when the electronic substrate is in a print position;
- a wiper to remove material from the stencil as the stencil is translated away from the electronic substrate by the gantry system; and
- an inspecting probe coupled to a second gantry system for inspecting a surface on the electronic substrate, the inspecting probe being movable to a position over the electronic substrate;

***wherein the stencil translates over the wiper while the inspecting probe inspects the electronic substrate when the electronic substrate is in the print position.***

In the Office action, the Examiner asserts that Peckham et al. teach an apparatus (200) for forming a pattern on a substrate (230) having a frame (202), a dispenser (208) which dispenses a

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material onto the substrate (230) through a stencil (206) and a controller (204) which controls dispensing of the material on the substrate and a fixed wiper (300) for removing material from the stencil as the stencil is moved away from the substrate. The Examiner references paragraph no. 0025 of Peckham et al., which vaguely puts forth the notion that “[t]he stencil cleaning mechanism may also stay stationary as the stencil is moved over the mechanism.” It should be noted that there is no teaching of a particular structure to accomplish this motion.

The Examiner further asserts that Nishikawa et al. teach an apparatus for forming a pattern on a substrate having a recognition camera or inspecting probe (3). The Examiner’s position is that it would have been obvious to one of ordinary skill in the art to modify the apparatus of Peckham et al. by providing the inspecting probe as taught by Nishikawa et al.

However, Nishikawa et al. teach inspecting the circuit board ***after the circuit board exits the print position***. See Nishikawa et al., paragraph no. 0043. It is standard practice within the stencil printing industry to inspect the circuit board after the circuit board exits the print position. There is no teaching, showing or suggestion in either Peckham et al. and/or Nishikawa et al., either separately or in any valid combination, of an apparatus in which the ***stencil translates over the wiper while the inspecting probe inspects the electronic substrate when the electronic substrate is in the print position***. Applicant’s invention allows for the inspection of the circuit board when the circuit board is in a print position while the stencil is being cleaned by the stencil wiper. The apparatus disclosed in Peckham et al. and Nishikawa et al. are incapable of performing this function.

Accordingly, claim 1 is submitted as novel, non-obvious and patentable over the references relied on by the Examiner.

Claims 6-10, which depend directly from claim 1, are patentable for at least the same reasons as claim 1.

In addition, claim 6 is amended to specify that “the stencil translates over the wiper substantially simultaneously with the inspection of the electronic substrate.” There is no teaching, showing or suggestion in either Peckham et al. or Nishikawa et al. of a structure capable of performing this function.

Claim 8 is amended to specify that “the stencil translates from a first front position, to a second back position, and returns to the first front position upon removal of the material by the

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fixed wiper.” There is no disclosure in Peckham et al. and Nishikawa et al., either alone or in any valid combination, of an apparatus capable of moving the stencil from a front position to a back position.

Claim 11 is directed to a method for performing a printing operation on a surface of a substrate. The method comprises:

- transporting the substrate into a print position for printing a material onto the substrate;
- aligning the substrate and a stencil, the stencil having at least one aperture to receive the material as the material is deposited onto the substrate;
- depositing the material through the stencil and onto the substrate;
- translating the stencil from a position over the surface of the substrate, over a wiper positioned to remove a residual material from the surface of the stencil as the stencil is translated; and
- inspecting the substrate using a video probe inspection system when the substrate is in a print position.***

For the same reasons given for claim 1, amended claim 11 is patentable over the references of record, including Peckham et al. and Nishikawa et al., since none of the references disclose the method steps of (1) translating the stencil from a position over the surface of the substrate over a wiper, and (2) inspecting the substrate using a video probe inspection system when the substrate is in a print position. Accordingly, reconsideration of the rejection of claim 11 is respectfully requested.

Claims 13 and 14, which depend from claim 11, are submitted as being patentable for the same reasons given for claim 11.

In addition, claim 13 is submitted as being patentable for the additional reasons given for claim 6.

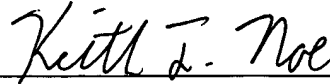
Claim 15, which substantially parallels the subject matter of claim 1, is submitted as being nonobvious and patentable over the references of record, including Peckham et al. and Nishikawa et al., for the same reasons given for claim 1. Reconsideration of the rejection of claim 15 is respectfully requested.

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**CONCLUSION**

Based on the foregoing, the application is believed to be in allowable condition and a notice to that effect is respectfully requested. If the Examiner has any questions regarding the application, he is invited to contact the Applicant's Attorney at the telephone number provided below.

Respectfully submitted,



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Keith F. Noe, Esq. (Reg. No. 34,686)  
LOWRIE, LANDO & ANASTASI, LLP  
Riverfront Office Park  
One Main Street  
Cambridge, MA 02142  
Tel.: (617) 395-7039  
Fax: (617) 395-7070  
Attorney for Applicant

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